

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
REGION 9, SAN DIEGO REGION**

ATTACHMENT E

MONITORING AND REPORTING PROGRAM

**ORDER NO. R9-2005-0007
NPDES PERMIT NO. CAS0107450**

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations (CFR) at 40 CFR § 122.48 requires that all NPDES permits specify monitoring and reporting requirements. The California Water Code (CWC) sections 13267 and 13383 also authorize the Regional Water Quality Control Board to require technical and monitoring reports. This Monitoring and Reporting Program establishes monitoring and reporting requirements to implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of this Regional Board.
- B. Monitoring must be conducted according to United States Environmental Protection Agency (U.S. EPA) test procedures approved under Title 40, United States Code of Federal Regulations (CFR), Part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act* as amended, unless other test procedures are specified in Order No. R9-2005-0007 and /or this Monitoring and Reporting Program and/or this Regional Board.
- C. A copy of the monitoring reports signed and certified as required by Reporting Requirement E.2. of Attachment D of Order No. R9-2005-0007, shall be submitted to the Regional Board at the address listed in section A.6 of this Monitoring and Reporting Program.
- D. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by Order No. R9-2005-0007 and this Monitoring and Reporting Program, and records of all data used to complete the application for Order No. R9-2005-0007. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended by request of this Regional Board or by the U.S. EPA at any time.
- E. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services to perform such analyses or a laboratory approved by this Regional Board.
- F. The discharger shall report in a cover letter all instances of noncompliance not reported under Order No. R9-2005-0007, Federal Standard Provisions (Attachment D), Section 5, *Twenty-four Hour Reporting* at the time monitoring reports are submitted. The reports shall contain the information listed in the Federal Standard Provisions (Attachment D), Section 5, *Twenty-four Hour Reporting* of Order No. R9-2005-0007.
- G. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their

continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

H. Monitoring results shall be reported at intervals and in a manner specified in Order No. R9-2005-0007 or in this Monitoring and Reporting Program.

I. This Monitoring and Reporting Program may be modified by this Regional Board, as appropriate.

II. MONITORING LOCATION

The Discharger shall establish the following monitoring location to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	M-001	Representative sample location of the resin rinse and backwash wastewater, prior to discharge to the storm drain (32°47'43"N; 117°17'20"W).

III. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location Discharge Point 001

1. The Discharger shall monitor the resin rinse and backwash wastewater at Discharge Point 001 as follows:

Constituent	Units	Sample Type	Minimum Sampling Frequency	Required Test Method
Flow	GPD	Estimate	Daily	1
Temperature	°F	Grab	Monthly	1
PH	pH units	Grab	Semi-annual ³	1
Grease and Oil	mg/L	Grab	Semi-annual	1
	Lbs/day ²	Calculated		
Total Suspended Solids (TSS)	mg/L	Grab	Semi-annual	1
	Lb/day ²	Calculated		
Settleable Solids	ml/L	Grab	Semi-annual	1
Turbidity	NTU	Grab	Semi-annual	1
Conductivity	µmhos/cm	Grab	Semi-annual	1
Chlorine, Total Residual	mg/L	Grab	Semi-annual ⁴	1
Chronic Toxicity	TUc	24 hr composite	Once over the term of the permit. ⁵	Please see section IV of this M&RP.

¹ All parameters shall be analyzed by the methods specified in 40 CFR 136.3.

² Lbs/day shall be calculated by the discharger for each monitoring event using the following formula:

$$\text{Lbs/day} = 0.00834 \times \text{Ce} \times \text{Q}$$

where:

Ce = the effluent concentration limit, µg/l.

Q = flow rate, million gallons per day (MGD)

³ pH monitoring shall be conducted weekly for the first 12 weeks following the effective date of Order No. R9-2005-0007. If pH effluent limitations contained in Order No. R9-2005-0007 are exceeded more than 6 times in the initial 12 week period, the Discharger shall conduct a special study to determine the cause of the pH exceedances and determine effective methods to comply with the pH effluent limitation contained in Order No. R9-2005-0007. pH monitoring shall revert to semi-annual after 12 consecutive weeks of compliance with the pH effluent limitations. If a pH violation is observed after the monitoring program has reverted to semi-annual, pH monitoring shall revert back to weekly until 12 consecutive weeks of compliance are demonstrated again.

⁴ Monitoring for total residual chlorine shall be conducted monthly for the first 6 months after the effective date of Order No. R9-2005-0007. After the first 6 months, monitoring for total residual chlorine shall be conducted semi-annually.

⁵ Chronic Toxicity results are due one year prior to the expiration date of the permit.

IV. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

Critical life stage toxicity tests shall be performed to measure chronic toxicity (TUc). Testing shall be performed using methods outlined in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (Chapman, G.A., D.L. Denton, and J.M. Lazorchak, 1995) or *Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project* (SWRCB, 1996)

Other tests may be used, if they have been approved for such testing by the State Water Resources Control Board. Dilution and control water should be obtained from an unaffected area of the receiving waters.

Approved Tests – Chronic Toxicity

Species	Test	Tier ¹	Reference ²
giant kelp, <i>Macrocystis pyrifera</i>	percent germination; germ tube length	1	a, c
red abalone, <i>Haliotis rufescens</i>	abnormal shell development	1	a, c
oyster, <i>Crassostrea gigas</i> ; mussels, <i>Mytilus spp.</i>	abnormal shell development; percent survival	1	a, c
urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	percent normal development	1	a, c
urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	percent fertilization	1	a, c
shrimp, <i>Homesimysis costata</i>	percent survival; growth	1	a, c
shrimp, <i>Mysidopsis bahia</i>	percent survival; fecundity	2	b, d
topsmelt, <i>Atherinops affinis</i>	larval growth rate; percent survival	1	a, c
Silversides, <i>Menidia beryllina</i>	larval growth rate; percent survival	2	b, d

¹ First tier methods are preferred for compliance monitoring. If first tier organisms are not available, the discharger can use a second tier test method following approval by the Regional Water Board.

² Protocol References:

a. Chapman, G.A., D.L. Denton, and J.M. Lazorchak. 1995. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms. U.S. EPA Report No. EPA/600/R-95/136.

b. Klemm, D.J., G.E. Morrison, T.J. Norberg-King, W.J. Peltier, and M.A. Heber. 1994. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms. U.S. EPA Report No. EPA-600-4-91-003.

c. SWRCB 1996. Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project. 96-1WQ.

d. Weber, C.I., W.B. Horning, I.I., D.J. Klemm, T.W. Nieheisel, P.A. Lewis, E.L. Robinson, J. Menkedick and F. Kessler 9eds). 1998. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA/600/4-87/028. National Information Service, Springfield, VA.

V. RECEIVING WATER MONITORING REQUIREMENTS (NOT APPLICABLE)

VI. OTHER MONITORING REQUIREMENTS

The monitoring program consists of the following three components:

- a. Core/Effluent Monitoring (see Section III)
- b. Regional Watershed/Ocean Monitoring

The Discharger shall participate and coordinate with state and local agencies and other dischargers in the San Diego Region in development and implementation of a regional watershed or ocean monitoring program for the Scripps Hydrologic Unit (906.30) or the Pacific Ocean as directed by this Regional Board. The intent of a regional monitoring program is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and to best utilize the pooled resources of the region. During the coordinated monitoring effort, the discharger's monitoring program may be expanded to provide a regional assessment of the impact of discharges to the watershed or Pacific Ocean.

- c. Special Studies

Special studies are intended to be short-term and designed to address specific research or management issues that are not addressed by the routine core monitoring program. The Discharger shall implement special studies as directed by this Regional Board.

VII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping and the general monitoring and reporting requirements below. In cases where the monitoring and reporting requirements contained within this section, and the Standard Provisions (Attachment D) conflict, the more stringent of the two requirements apply.
2. Annually, the discharger shall evaluate the data collected pursuant to Monitoring and Reporting Program No. R9-2005-0007 and determine if the data indicates that the

discharge has caused or contributed to an exceedance of applicable water quality objectives or impairment of water quality needed for designated beneficial uses of the Pacific Ocean.

3. The discharger shall file a new Report of Waste Discharge not less than 180 days prior to the following:
 - i. Addition of any industrial waste to the discharge or the addition of a new process or product resulting in a change in the character of the wastes.
 - ii. Significant change in disposal method (e.g. change in the method of treatment which would significantly alter the nature of the waste).
 - iii. Significant change in disposal area (e.g. moving the discharge to a disposal area significantly removed from the original area, potentially causing different water quality or nuisance problems).
 - iv. Increase in flow beyond that specified in this Order.
 - v. Other circumstances, which result in a material change in character, amount, or location or the waste discharge.
4. The discharger must notify this Regional Board, in writing, at least 30 days in advance of any proposed transfer of this facility to a new discharger. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgment that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable after the transfer date.
5. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the California Regional Water Quality Control Board, San Diego Region and the United States Environmental Protection Agency, Region IX. As required by the Clean Water Act, Reports of Waste Discharge, this Order, and effluent monitoring data shall not be considered confidential.

B. Self Monitoring Reports

1. The Discharger shall submit semiannual Self Monitoring Reports including the results of all required monitoring and monitoring conducted in addition to the minimum required monitoring and using USEPA approved test methods or other test methods specified in this Order. Semiannual reports shall be due on August 1 and February 1 following each semiannual period.
2. Monitoring periods for all required monitoring shall commence according to the following schedule:

Sampling Frequency	Monitoring Period Starts On...	Monitoring Period	Reporting Due with SMR on...
Daily	February 19, 2005	Calendar day (Midnight through 11:59 PM)	August 1 February 1
Monthly ¹	February 19, 2005	1 st day of calendar month through last day of calendar month	August 1 February 1
Semiannual	February 19, 2005	January 1 through June 30 July 1 through December 31	August 1 February 1
Once during the 5-year permit cycle	February 19, 2005	During the term of the permit	One year prior to the expiration date of the permit
Special weekly pH monitoring study	February 19, 2005	The first 12 weeks following the effective date of the permit.	First day of the second month following the 12 weeks of sampling

¹ Including accelerated monitoring for total residual chlorine.

3. The Discharger shall report with each sample result the applicable Minimum Level (ML) and the laboratory current Method Detection Limit (MDL) as determined by the procedure in 40 CFR Part 136.
4. The Discharger shall submit data on a copy of the Monitoring and Reporting Form provided in section VII.C. of this Monitoring and Reporting Program. Additional data, and data required to be submitted as an attachment to the reporting form must be arranged in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.
5. Annually the Discharger shall evaluate the possibility of the discharge to contain pollutants in concentrations that exceed water quality objectives specified in Table B of the Ocean Plan. By February 1st of each year, the facility shall certify that the discharge of resin rinse and backwash wastewater does not contain pollutants in concentrations that exceed the objectives specified in Table B of the Ocean Plan. If the Discharger does believe the discharge may contain pollutants that exceed the water quality objectives specified in Table B of the Ocean Plan, the Discharger shall notify the Regional Board in writing.
6. The Discharger shall attach a cover letter to its Self Monitoring Report. The information contained in the cover letter shall clearly identify violations of the WDRs, discuss corrective actions taken or planned and the proposed time schedule of corrective actions. Identified violations should include a description of the requirement that was violated and a description of the violation. Monitoring results must be reported on forms approved by this Regional Board. Self Monitoring Reports shall be submitted to the addresses listed below:

Submit monitoring reports to:
Industrial Compliance Unit California Regional Water Quality Control Board San Diego Region 9174 Sky Park Court, Suite 100 San Diego, California 92123-4340

Notifications required to be provided to this Regional Board shall be made to:

Telephone – (858) 467-2952 or

Facsimile – (858) 571-6972

C. Self Monitoring Form

As specified in section VII.B.4 of this Monitoring and Reporting Program, the Discharger shall submit data to the Regional Board using a copy of the Monitoring and Reporting Form provided on the next page of this document. Additional monitoring data and applicable signatory requirements should be submitted as an attachment to this form.

D. Other Reports (NOT APPLICABLE)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
REGION 9, SAN DIEGO REGION
MONITORING AND REPORTING FORM
ORDER NO. R9-2005-0007
NPDES PERMIT NO. CA0107450

Please check the applicable reporting period: ☐ January 1st – June 30th (Due by August 1st)

☐ July 1st – December 31st (Due by February 1st)

Date ___/___/___

Constituent	Sample Type	Minimum Sampling Frequency	Sample Date	Results	Effluent Limitations			Units
					Monthly Average	Weekly Average	Instantaneous Maximum	
Flow	Estimate	Daily	N/A	¹	-- ²	-- ²	-- ²	GPD
Temperature	Grab	Monthly			--	--	--	°F
					--	--	--	
					--	--	--	
					--	--	--	
					--	--	--	
PH	Grab	Semi-annual ³			Within limit of 6.0 to 9.0 at all times			pH units
Grease and Oil	Grab	Semi-annual			25	40	75	mg/L
	Calculated ⁴				0.001	0.002	0.003	Lbs/day
Total Suspended Solids (TSS)	Grab	Semi-annual			20	--	30	mg/L
	Calculated ⁴				0.001	--	0.001	Lb/day
Settleable Solids	Grab	Semi-annual			1.0	1.5	3.0	ml/L
Turbidity	Grab	Semi-annual			75	100	225	NTU
Conductivity	Grab	Semi-annual			--	--	--	µmhos/cm
Chlorine, Total Residual	Grab	Semi-annual ⁵			--	--	--	mg/L
Chronic Toxicity	Grab	Once over the term of the permit ⁶			Daily Maximum of 1.0			TUc

¹ Daily flow data should be submitted as an attachment to this form.

² Daily flow effluent limitation is 5,000 gallons per day.

³ pH monitoring shall be conducted weekly for the first 12 weeks following the effective date of Order No. R9-2005-0007. If pH effluent limitations contained in Order No. R9-2005-0007 are exceeded more than 6 times in the initial 12 week period, the Discharger shall conduct a special study to determine the cause of the pH exceedances and determine effective methods to comply with the pH effluent limitation contained in Order No. R9-2005-0007. pH monitoring shall revert to semi-annual after 12 consecutive weeks of compliance with the pH effluent limitations. If a pH violation is observed after the monitoring program has reverted to semi-annual, pH monitoring shall revert back to weekly until 12 consecutive weeks of compliance are demonstrated again. Accelerated monitoring data should be included as an attachment to this form.

⁴ Lbs/day shall be calculated by the discharger for each monitoring event using the following formula:

$$\text{Lbs/day} = 0.00834 \times C_e \times Q$$

where:

C_e = the effluent concentration limit, $\mu\text{g/l}$.

Q = flow rate for the sample date, million gallons per day (MGD)

⁵ Monitoring for total residual chlorine shall be conducted monthly for the first 6 months after the effective date of Order No. R9-2005-0007. After the first 6 months, monitoring for total residual chlorine shall be conducted semi-annually. Accelerated monitoring data should be included as an attachment to this form.

⁶ Chronic toxicity results are due one year prior to the expiration date of the permit. Chronic toxicity data should be submitted as an attachment to this form.

Ocean Plan Table B Certification (Due February 1st)

Order No. R9-2005-0007 does not contain effluent limitations for individual metals and priority pollutants listed in Table B of the Ocean Plan (except chronic toxicity) since very insignificant levels of these pollutants are expected to be present in the discharge. Thus, the Discharger shall certify that these constituents are not present in the discharge in the annual reports. If the Discharger believes one or more of the constituents specified in Table B of the Ocean Plan are present in the discharge at concentrations exceeding those specified in the Ocean Plan, the Discharger shall notify the Regional Board in writing as an attachment to this form. By signing the statement below and submitting a signed certification statement meeting the requirements specified under section I.E.2. of Attachment D of Order No. R9-2005-0007, the Discharger has certified that the constituents listed in Table B (with the exception of chronic toxicity) are not present in the discharge at concentrations exceeding those established in Table B of the Ocean Plan:

On behalf of Culligan Water Conditioning of La Jolla, I certify that pollutants are not present in the discharge of resin backwash from Culligan Water Conditioning of La Jolla in concentrations exceeding the water quality objectives specified in Table B of the Ocean Plan.

Signature _____

Date _____

Print Name _____

Title _____

Additional monitoring data and applicable signatory requirements (specified in section I.E.2. of Attachment D of Order No. R9-2005-0007) should be submitted as an attachment to this document.